

Ohio Agricultural Experiment Station.

BULLETIN 113.

WOOSTER, OHIO, DECEMBER, 1899.

PLUMS: A COMPARISON OF VARIETIES.

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BULLETIN

OF THE

Ohio Agricultural Experiment Station.

NUMBER 113.

DECEMBER, 1899.

PLUMS: A COMPARISON OF VARIETIES.

BY W. J. GREEN.

The first planting of plum trees in the Station orchard was made in 1893, and new varieties have been added each year since, until the collection now embraces about 175 varieties. About half of the total number bore fruit in 1899; and a smaller number in the years 1898 and 1897.

Careful notes have been made, but the time has been too short for critical comparisons, in most cases. As far as possible, observations have been extended to varieties fruiting in other orchards in various parts of the state, but this method has not been found practicable except with comparatively few varieties. These few varieties are those which have been quite generally planted and their value pretty well determined. Wherever positive opinion is expressed in these notes it may be understood that it is the result of observations made both here and elsewhere, and in many cases the views of the other observers have been incorporated. Positive assertions concerning varieties must be taken provisionally; however. Because of dissimilar soil and conditions, different observers may disagree, and because of variable seasons any observer may be obliged to modify his views from time to time.

Although incomplete and preliminary to a fuller account, it is thought best to publish the following notes, for there is increasing interest in plum culture and considerable inquiry concerning varieties. While fruit growers may not feel much interest in the classification of plums, not caring to know the botanical relation of a variety, provided its practical value is understood, it is often a matter of convenience to arrange varieties in groups. For this reason the accepted grouping is followed, but some groups are not included because representatives of all have not fruited here. It is considered sufficient to characterize the groups briefly, without giving botanical description in full.

NATIVE PLUMS.

There are several classes, or groups, of native plums, but the dividing lines are not, in all cases, plain. It is well, however, to keep some general distinctions in mind.

The reputation of native plums has suffered considerably because of the fact that many worthless varieties have been introduced, and also owing to the fact that a great many trees have been propagated by budding on peach stocks. Thus the impression has become general that native plums are poor in quality and very short lived. But few general statements can be made concerning the native sorts, although it might be safely said that they suffer less from the attacks of the curculio and are less liable to rot than domestica varieties; besides, they are hardier. It is better, however, to consider them by classes, as in this manner the distinctions can be more clearly drawn. Native plums are unfertile when a single variety is planted by itself. In a mixed plantation, consisting of Natives, Japanese and European, it may not be necessary to give this matter attention, but if only a few trees of native sorts are planted, care should be taken to include two or more varieties blooming at about the same time, to insure cross fertilization.

THE AMERICANA GROUP.

This is the hardest type of native plums and is found growing wild in the northern part of the United States and Canada. The trees are vigorous in growth, with large, thick, dark green leaves. The fruit is firm; with thick, tough skin, dull in color, but usually of high quality, and late in ripening.

A disease known as "plum pockets" often attacks the leaves and fruit of this species, and the trees are subject to a blight which often does serious damage. In the central and southern portion of the state the leaves sometimes drop prematurely, probably from the effect of the leaf rust. Black knot, shot-hole fungus and fruit rot do not trouble varieties of this class seriously, nor does the curculio harm them to the same extent that it does European varieties. More or less astringency is usually found next to the skin and stone, and this comes out more decidedly in cooking, but in delicacy of flavor nearly all of the varieties stand high.

Owing to dull color and rather unattractive appearance, but few varieties of this class are likely to prove profitable for market in this state, except in a limited way; but some are very desirable for home use.

AMERICAN EAGLE: — One of the best of the native sorts. The trees are vigorous and prolific; fruit medium to large; about one and one-fourth inches in diameter; purplish; sweet but with some acidity of skin and stone. Season of ripening medium. Although no variety of this class can be counted as equal in value in this section to the best European sorts, the American Eagle is worthy of general trial.

CHAMPION:—One of the largest of the class, the fruits often attaining nearly one and one-half inches in diameter. Rather a dull, purplish red; sweet except at skin and stone. Late in ripening and may prove valuable for market because of this fact, in connection with its large size.

COLORADO QUEEN:—Fruited here one season only, but seems to be valuable, especially because of good quality. Not quite as large as desirable, however.

CHENEY:—One of the earliest of this class. Fruit about one and one-fourth inches in diameter, nearly spherical; purplish; of excellent quality and with but little astringency of skin and stone. Because of earliness, large size and good quality, this variety is deserving of extended trial. In a small way it may be found profitable for market, but it is particularly recommended for home use.

HAWKEYE:—The largest plum of the class in fruit here the past season, often nearly one and one-half inches in diameter, and nearly globular in form. Fruit purplish, rather dull in color; flesh sweet but with considerable acidity of skin and stone. Possibly it might not succeed in the southern part of the state, but in the northern section it would, most likely, prove profitable for market in a small way. For home use, it is desirable and worthy of trial.

ILLINOIS IRONCLAD:—Vigorous and prolific; rather above medium size, scarlet, but the abundant bloom makes the fruit appear dull; sweet, but acid at stone. Not as large as the Hawkeye but has better foliage. Worthy of trial.

KICKAPOO:—Tree very open in habit, and needs shortening in to induce a more stocky growth; fruit medium to large, rather dull in color; quality good. Fruit drops as soon as ripe, and even before.

LOUISA:—One of the largest and best of the class. Tree vigorous and prolific; fruit large and of good quality. Midseason.

LE DUC:—A prolific midseason variety of excellent quality. Possibly too small for market, but its high quality entitles it to a place in the home garden.

ROLLINGSTONE:—A vigorous and prolific variety, of good quality, but the fruit is dull in color and drops very easily before fairly ripe. It is worthy of a place in the family orchard but may not prove profitable for market.

WOLF:—A very prolific freestone of medium size and fair quality, ripening in midseason. Inclined to overbear, but it may be counted as one of the most reliable of its class.

WEAVER:—Medium to large, red, mottled, of good quality, with but little acidity of stone and skin. Does very well here although rather dull in color for market. It does not drop as badly as most American varieties.

YELLOW SWEET:—Tree quite vigorous and prolific, forming a symmetrical and bushy top; fruit of medium size, yellow, sweet; excellent for eating raw. A single tree for home use might be desirable, but too small and soft for market.

THE MINER GROUP.

This class is regarded as intermediate between the Americana and Wild Goose groups, resembling the former very closely. It includes some very excellent varieties for culinary purposes. Essentially the same statements apply here as were made regarding the Americana group concerning insects and diseases.

FOREST ROSE:—A medium sized native sort. Tree vigorous and prolific, fruit of good quality, with little or no acidity of skin and stone. Seems inclined to overbear and the fruit is small in consequence. **FOREST ROSE IMPROVED** seems to be larger and better in some respects.

IDALL:—A productive and desirable sort for home use, especially for eating raw. Possibly not large enough for market, besides the fruit falls easily and cracks badly. It is worthy of trial because of its excellent quality and fine appearance.

MINER:—One of the best of the class. Fruit medium to large, dull red and of excellent quality. Valuable both for home use and for market.

PRAIRIE FLOWER:—Tree vigorous and prolific; fruit medium to large, red, sweet with but little acidity of stone. This appears to be one of the most promising of native varieties, especially because of large size and good quality. It does not cook to pieces and is unsurpassed for canning; while it is worthy of trial for market it is especially recommended for home use.

THE WILD GOOSE GROUP.

The varieties of this class are mostly strong in growth and very fruitful. The foliage is smooth and glossy, resembling that of the peach. The fruit is thin-skinned, juicy, often watery, usually not of high quality. The species is more southerly in its range than the Americana, but is perfectly hardy in this state. The fruit is attacked by the curculio but much of it escapes injury, and a crop is common even without jarring. The trees of this class are subject to the same diseases referred to as attacking Americana varieties. Fruit of this class meets with a fair demand in our markets, but at a lower price than the domestica varieties. Varieties of this class are preëminently reliable in fruiting qualities.

CHOPTANK:—A seedling of Wild Goose, about the same size and a little later in ripening. Tree vigorous and prolific; fruit medium to large, bright red, very attractive in appearance, rather acid but of good quality. Undoubtedly this will prove to be a profitable market sort in many sections, as the fruit is beautifully colored and very firm. The tree is ornamental both in foliage and fruit.

MILTON:—Somewhat like Wild Goose in habit of growth; fruit ripening at the same time, or a little earlier. One of the most promising of the class.

POOLE'S PRIDE:—Habit of growth rather more vigorous than Wild Goose; fruit a little larger and later in ripening and superior to that variety in quality. This variety has been so satisfactory here that it is confidently recommended both for home use and market.

WILD GOOSE:—One of the best known of native sorts and for this reason it seems to be the standard by which native varieties are commonly judged. Its earliness and prolificacy are its chief merits. In quality it is inferior to many other native varieties, nor is it as large as some. It is valuable for market in a limited way, and as far as sales can be effected its culture is very profitable. It may be regarded as superseded by better varieties.

WHITAKER:—Tree a vigorous grower, and needs cutting back to thicken the naturally long and slender growth. Fruit medium to large, red, of fair quality, ripening with Wild Goose.

THE WAYLAND GROUP.

Formerly this was included in the Wild Goose group. In habit of growth the trees are similar in both groups, but the foliage of varieties of the Wayland group is very shiny, and in some cases bears a close resemblance to that of the osage orange, being quite ornamental. The fruit is very firm, and even when fully ripe is not so watery as that of the Wild Goose class.

Some varieties of this class are very ornamental in both foliage and fruit. The varieties are mostly late in ripening, and some do not always mature in the northern part of the state. As a class, they are wonderfully prolific, and are but little troubled by disease or insects, although not exempt from those mentioned as affecting varieties of other classes.

GOLDEN BEAUTY:—A medium sized, yellow variety, sweet and of good quality when eaten raw, but very acid when cooked. Tree very ornamental when in fruit, and the bright green foliage is beautiful during the entire season.

MISSOURI APRICOT:—A medium sized, yellow plum, somewhat like Golden Beauty. Quality good when fully ripe, but develops considerable acidity in cooking. There are so many better varieties that but little can be said in its favor.

MOREMAN:—A medium sized, bright red variety; late in ripening, not always reaching maturity in this latitude. Useful chiefly for jelly, and as an ornamental tree.

REED:—A vigorous and prolific, native variety, with bright, shiny foliage, somewhat resembling the osage orange in appearance. As an ornamental tree it is worthy of consideration, for it is beautiful in foliage during the entire season of growth and very striking when in fruit. The

fruit is of medium size, bright scarlet, appearing as though polished, and of good quality. It is rather acid when cooked, but yields a jelly which is unsurpassed in flavor and of a rich carmine color. In a limited way this variety would prove profitable for market, and it is deserving of a place on the lawn or in the garden.

SUCKER STATE:— In habit of growth, size and form of fruit much like the Reed, but the fruit is duller in color and a little earlier in ripening. It will serve the same purpose as the Reed, although less desirable as an ornamental tree.

THE CHICKASAW GROUP.

In habit of growth similar to the Wild Goose type, but rather dwarfer and more spreading. The twigs are zigzag in growth, slender, red in color. The leaves are slender, often very small, shiny, and folded, or trough-like. The fruit is juicy, often stringy, and usually not of high quality. Although southern in habit the varieties, so far as tested, are hardy here. For domestic purposes the varieties of this group probably take the lowest place of any of the natives. The same remarks apply regarding diseases and insects as have been made concerning the other native groups.

JENNIE LUCAS:— A very early, medium sized plum of but little value except for earliness, being one of the first to ripen. Color dull and quality poor.

POTTAWATTAMIE:— A very prolific, medium sized, red plum, ripening soon after Wild Goose. It is much inclined to overbear and consequently is usually very small. It can hardly be recommended where better sorts can be grown.

NEWMAN:— One of the best of the Chickasaw class, and may be ranked as desirable, although there are many other better varieties ripening at about the same time.

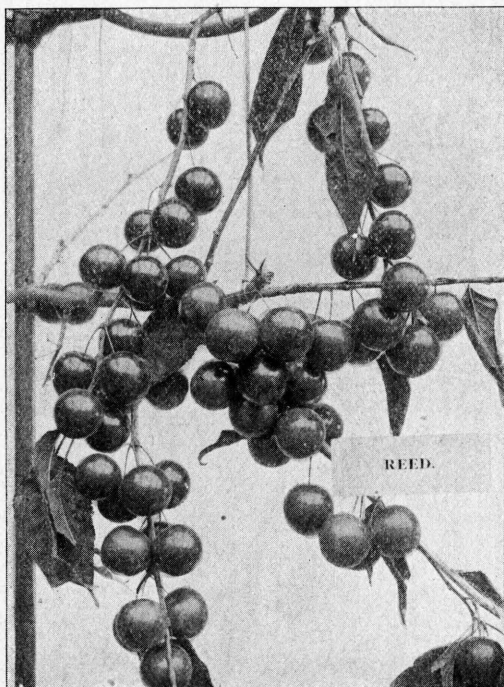
YELLOW TRANSPARENT:— Tree quite vigorous, forming a handsome top. Fruit of medium size and of good quality, but cracks badly. Ripens early, or at about the same time as the Wild Goose. While it has some value its usefulness is quite limited.

THE TRIFLORA GROUP, OR JAPANESE PLUMS.

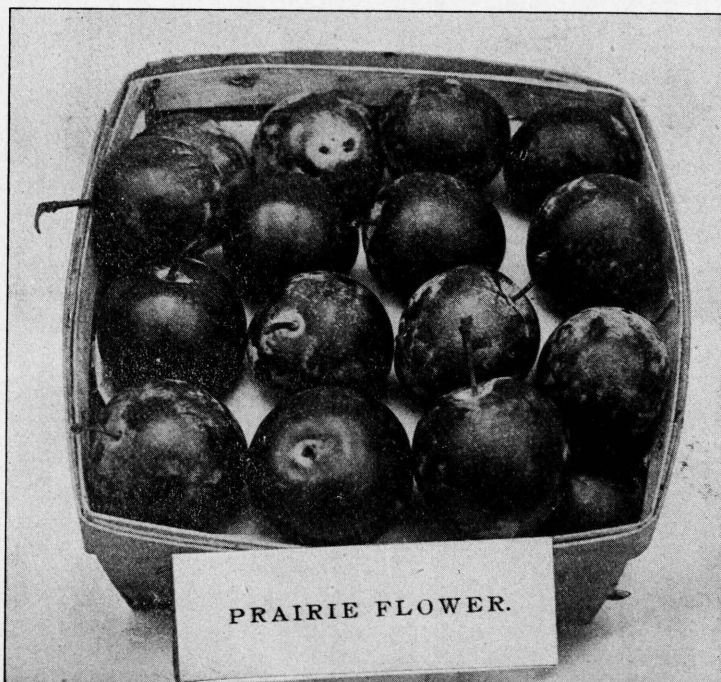
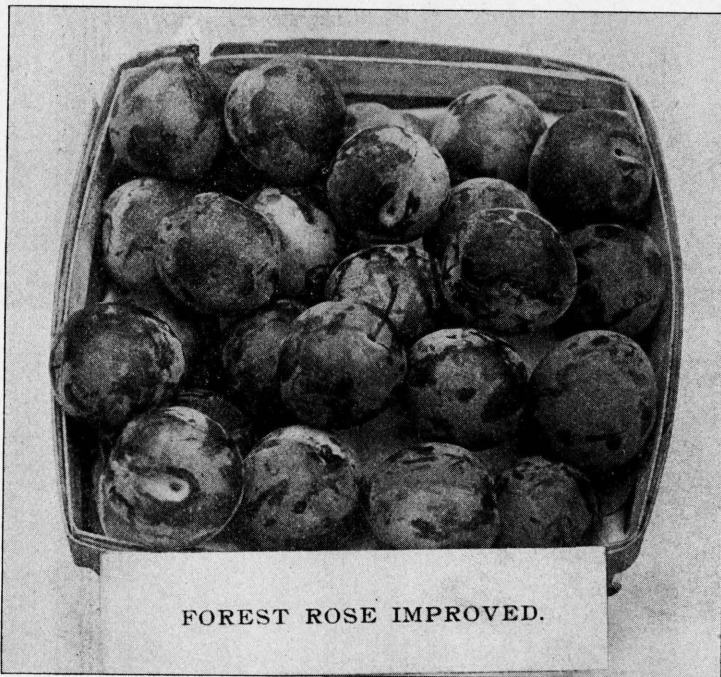
This interesting group is now well known to plum growers, although but recently introduced. The trees are robust in habit and mostly very prolific, for which reason the varieties of this class have, from the first, been regarded favorably by both nurserymen and fruit growers. The flowers are usually borne three to each bud, which gives the name "triflora." The fruit is usually globular and mostly highly colored, generally clingstone, quite subject to rot, and not exempt from the attack of curculios. A prominent characteristic is the habit of early blooming,



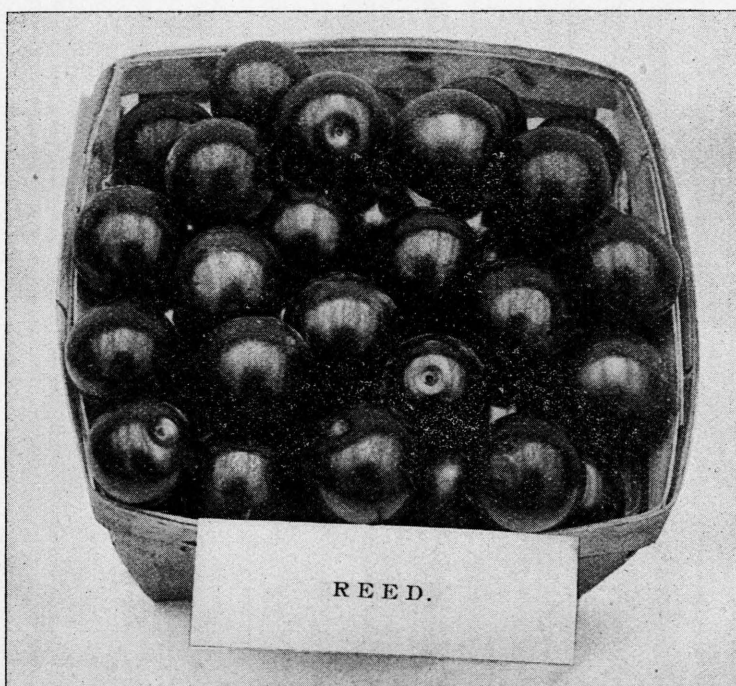
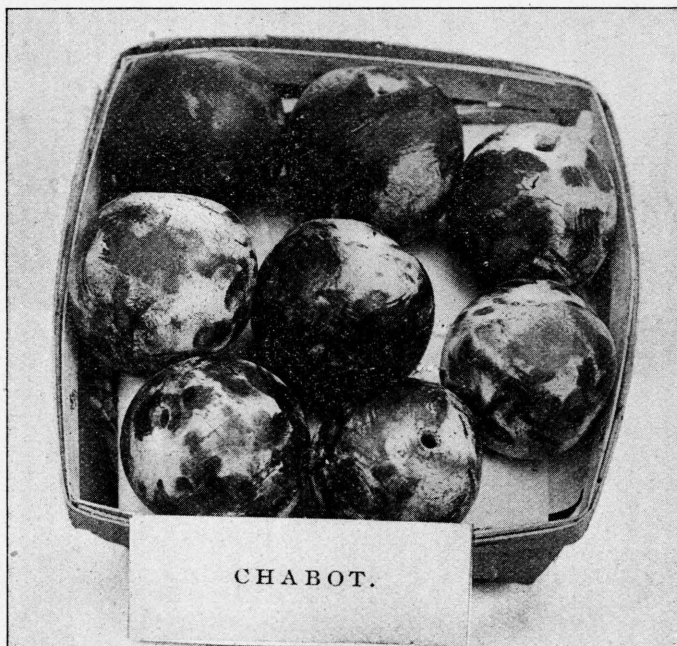
A part of the plum orchard.



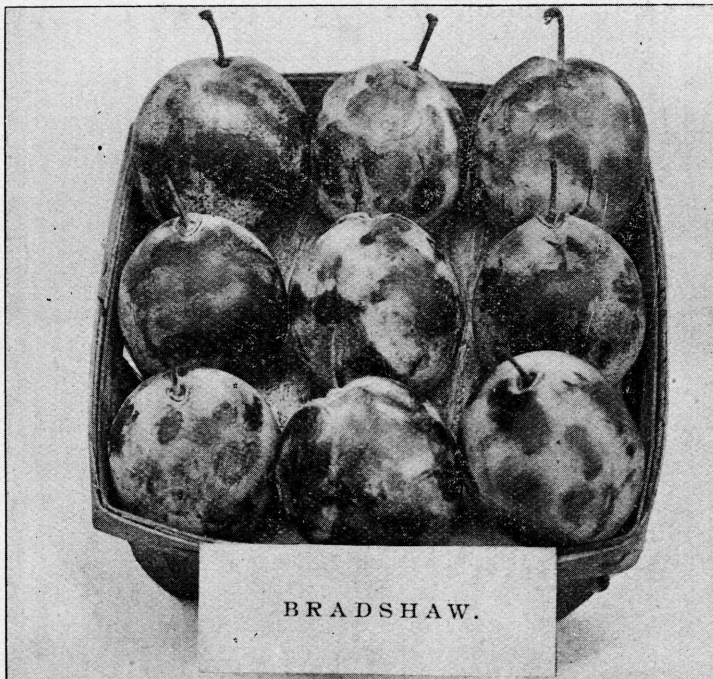
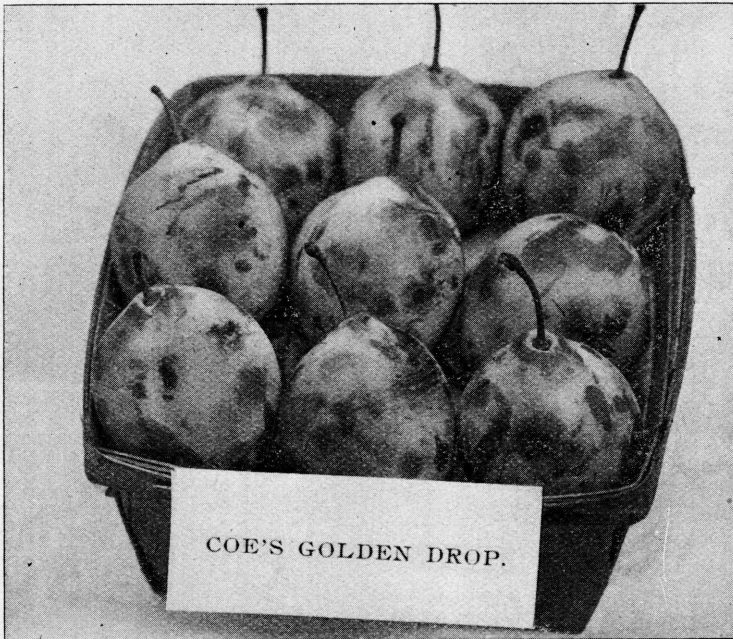
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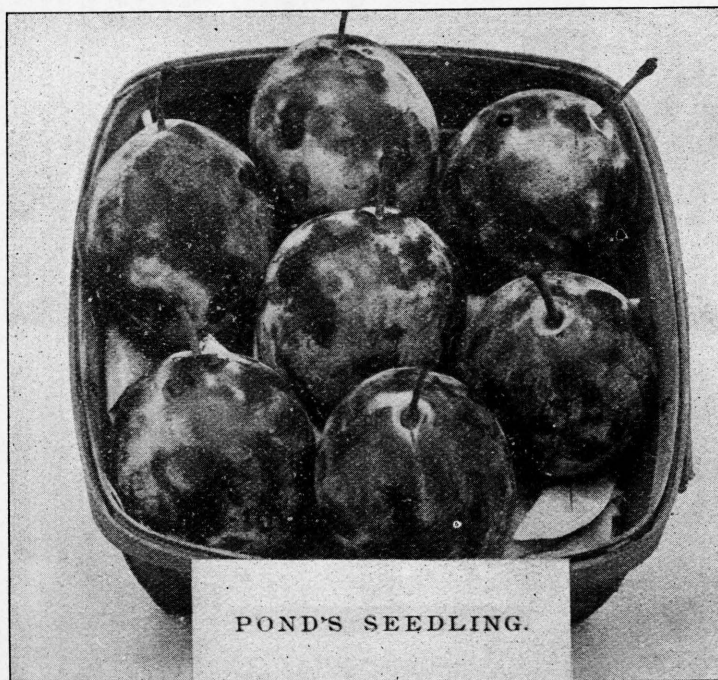
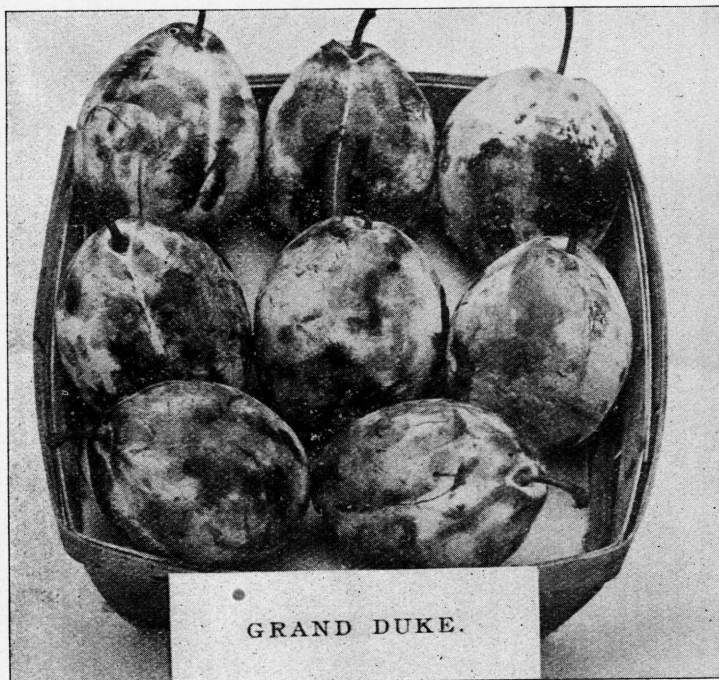
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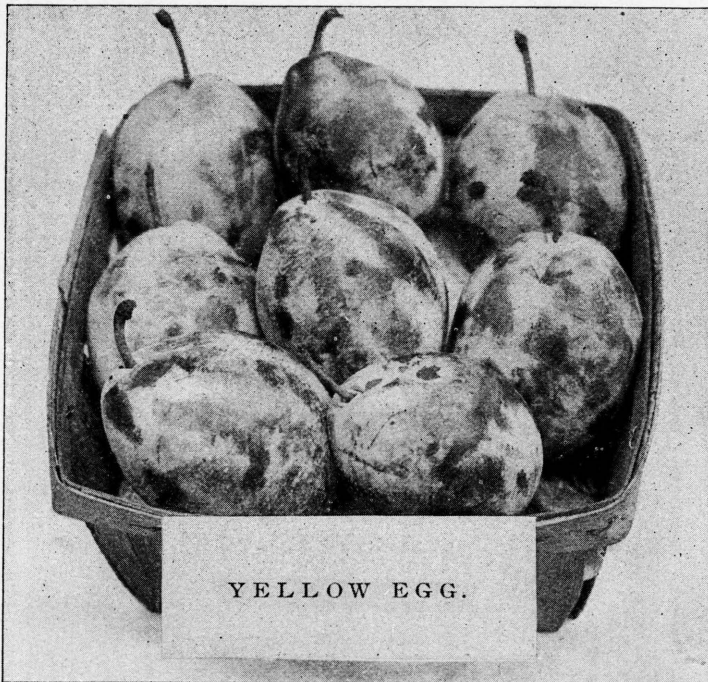
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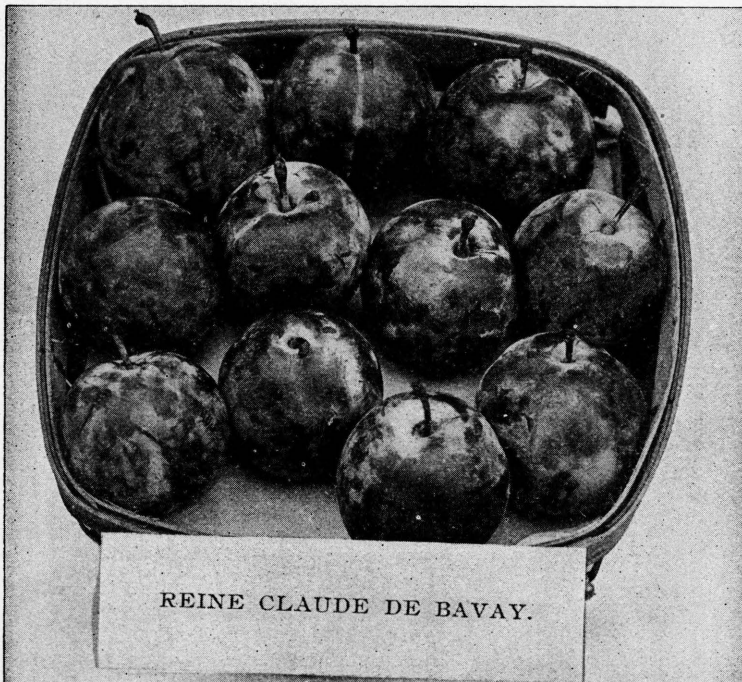
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YELLOW EGG.



REINE CLAUDE DE BAVAY.

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which makes the varieties of this class rather uncertain in some localities. In hardiness the class is hardly equal to the domesticas, although this does not hold good of all varieties, there being a wide range in their ability to withstand cold. Possibly expectations have been raised too high concerning Japanese plums, but, without a doubt, there are some valuable varieties found in the class.

ABUNDANCE:—This is one of the most valuable of the Japanese sorts. The tree is vigorous and upright in growth and quite hardy, although the blossom buds suffered considerably here in the severe winters of 1897 and 1899. It has the fault of most other varieties of the class of blooming very early, hence it should not be planted in localities subject to late spring frosts. The fruit is medium to large, bright red, attractive in appearance and of good quality. Ripens a little after Red June. It is less subject to rot than Burbank, but more so than Red June. Probably in but few localities can it be planted safely for market, but it will, most likely, prove profitable in a small way and desirable for home use.

BAILEY:—Closely resembling Chabot and by some regarded as identical.

BURBANK:—This is now recognized as one of the best of the Japanese sorts. The tree is vigorous and uncommonly prolific, and begins to bear very young. Fruit medium to large, bright and attractive in color and of fair quality; early to medium in time of ripening. Its chief fault is susceptibility to rot. No variety surpasses it in prolificacy and precociousness.

CHABOT:—One of the best of the Japanese sorts. Tree vigorous, prolific; fruit large, beautifully colored and of good quality. Seems to be rather hardier than most varieties of this class and also less subject to rot. Ripens later than Burbank and at about the same time as Lombard.

HALE:—Not fruited here, although our tree is of sufficient size and age. The flower buds were all killed and the tree received considerable injury last winter.

KERR:—A very early yellow variety; medium to large, of fair quality; ripens before Red June and Wild Goose, and about the same time as Ogon. Earliness seems to be its strongest recommendation.

OGON:—An early ripening, yellow fruited, variety. Although not of high quality its earliness and large size combine to make this a variety of considerable promise for market purposes. It is suitable for canning, although ripening rather early for that purpose, being a little earlier than Abundance.

RED JUNE:—Because of extreme earliness, fine appearance and comparative hardiness, this variety seems destined to take rank as one of the best of the Japanese sorts. It is nearly two weeks earlier than Abundance and ripens at about the same time as Wild Goose. It has proved hardier here than either Burbank or Abundance, and less in-

clined to rot. The fruit is medium to large, well colored and of good quality. It can hardly fail to prove profitable for market, in a limited way at least. Although not quite as early as Willard, it is larger and of much better quality.

SATSUMA:— This variety has proved to be quite tender here, the blossoms having been winter killed when Burbank, Abundance and Red June have borne crops. The trees have suffered fully as much as peach trees near by. They bore a partial crop in 1898, nearly all of which rotted before fully mature. The variety seems to have little to recommend it for this latitude.

WILLARD:— This is the earliest of Japanese varieties, but on account of small size and poor quality it cannot be regarded with much favor. Earliness seems to be its sole merit.

THE DOMESTICA GROUP.

The common *Domestica*, or European plum, is best known of all the different groups, and at present is the most important of all. The varieties vary greatly in vigor of growth and productiveness, as well as in susceptibility to disease. Black-knot and shot-hole fungus affect all varieties, but some are more susceptible than others. The fruit rot is the most serious obstacle in the culture of varieties of this class. All are subject to the attacks of the curculio. There is some difference in varieties as regards hardiness, but nearly all must be classed as half hardy in this state. In the winter of 1896-97, the fruit buds of nearly all varieties of this class were killed in the Station orchard, not enough remaining of any variety to give a crop. In the winter of 1898-99 much injury was done to many varieties, and similar reports have been received from other sections.

ARCH DUKE:— A very late ripening, large, dark blue sort, of considerable promise. A little later than Grand Duke, and tree a better grower. Has fruited here one season only, but it appears to possess great merit.

BRADSHAW:— A free growing, healthy and prolific variety, ripening earlier than most others of the class. It does not come into bearing as early as some, but begins to give good crops at about six years of age. Fruit large, purplish red and of good quality. Although it seems to do well in all parts of the state it has not been planted as largely as it deserves to be.

COE'S GOLDEN DROP:— A very large, late ripening, yellow, or greenish-yellow variety. Tree rather slow in growth and does better if top worked. It may not ripen in some parts of the state, on heavy soils, but in many sections would, no doubt, prove satisfactory. Much better in quality and less subject to rot than Yellow Egg.

CLYMAN:— A medium sized, reddish purple variety, of good quality. Tree quite vigorous and prolific. The chief merit of this variety is its

earliness, ripening ahead of most others of its class, and at about the same time as Wild Goose, or a month ahead of Lombard, and ten days in advance of Czar. It is rather hardier also than most other European sorts, having passed two severe winters here with comparatively little damage. The Czar has been reported earlier than Clyman by some, but there were ten days in favor of the Clyman here, besides the latter is decidedly the hardier. A seedling on trial seems to be as early as Clyman and considerably larger.

CZAR:—A medium to large, blue plum of considerable merit, but probably not equal to Clyman. Reported as tender in New York and Canada, but not fully tested here, as we have only one tree which bore for the first time in 1899. It is a little larger and of better color than Clyman, and may prove valuable to plant for a succession, ripening as it does, about two weeks in advance of Bradshaw.

DUANE'S PURPLE:—A medium to large, purplish variety, ripening at midseason, or at about the same time as the Lombard.

ELWOOD:—This appears to be the same as Lombard.

EARLY RED RUSSIAN:—A small to medium sized, coppery-red plum, of comparatively little value. It ripens between Bradshaw and Lombard, hence has nothing in the way of earliness to recommend it, although the name would seem to imply that it is an early sort.

GRAND DUKE:—A very moderate grower and requires some age before good crops are produced. Would do better if top grafted on some strong growing sort. Fruit very large, dark blue, with abundant bloom. Very showy, hence a good market sort, and of good quality for table use. One of the latest in ripening, and does not come into competition with very many other good varieties, hence a safe variety to plant.

GERMAN PRUNE:—A well known and valuable sort. Tree a rather poor grower; fruit medium to large, dark blue, late in ripening. Suitable either for home use or for market.

GUEH:—A medium to large, dark purple variety, and has been quite extensively planted in this state. Tree quite vigorous and a good bearer, but the fruit is somewhat inclined to rot. Ripens a little after midseason, or about two weeks later than Lombard. It may be regarded as a safe variety to plant, as it always finds a ready sale in market.

IMPERIAL GAGE:—A greenish-yellow plum of excellent quality; medium to large, ripening with the Lombard. The tree is quite vigorous and prolific, and in every way this is a desirable variety. The fact that it ripens at a time when so many other good varieties are ripe detracts somewhat from its value for market, but for home use it is unexcelled and should be in every collection.

LINCOLN:—Tree a slow and irregular grower, and should be grafted on some free growing sort. Fruit large to very large, coppery-red, quality good; ripens a little before Bradshaw. Because of large size, beauty and earliness this is likely to become a popular variety. It has fruited here but one season but it must be ranked as very promising.

LOMBARD:— One of the best known and most extensively planted of European sorts. It is one of the most prolific and early fruiting of the class, but is inferior to many others both in size and quality. While it is generally reliable it has been planted too freely in many localities.

ODELL:— Resembles the Lombard so closely that the same terms must be used in describing both. Possibly the Odell is less vigorous than the Lombard, but the time of ripening is the same with both.

POND'S SEEDLING:— A very large, late ripening variety. Although the fruit is large and showy the variety is not regarded as a profitable market sort. It is considerably inclined to rot and is not so prolific as many others. In quality it ranks as medium, hence it is less desirable for home use than many others.

PRINCE OF WALES:— Tree vigorous and prolific, with healthy, dark-green foliage; fruit large, round, coppery-red, and of good quality; time of ripening, midseason. This variety has been but little grown in this state, but because of its vigor and health of tree, combined with its showy fruit and prolificacy, it ought to become popular. Its season of ripening is about the same as the Lombard.

QUACKENBOS:— Tree vigorous; foliage uncommonly healthy, but it has not borne well here; fruit large, dark blue; ripening at midseason. If sufficiently prolific it seems to have considerable merit.

RICHLAND:— A prolific and reliable variety, but too small, and ripens at a time when many larger sorts are in the market. It may do very well where there is no competition with better varieties, but it must give place to those which are larger and more showy. It is excellent for canning, however, and possesses qualities which recommend it for the home garden.

REINE CLAUDE DE BAVAY:— Commonly written "Reine Claude," and sometimes "Bavay," simply. Tree very prolific, fruit medium to large, greenish-yellow, very sweet and of the highest quality. Desirable in every way and can be recommended both for home use and for market. Rather late in ripening.

MOORE'S ARCTIC:— Tree a moderate grower and quite prolific; fruit of medium size, dark blue and of good quality. It has the reputation of being hardier than most of the European varieties, and such it has proved to be here. It has endured the cold better than any variety of its class, and is less subject to rot than most others. It is too small to find a ready sale when the market is supplied with larger plums, but it deserves a place because of its reliability.

MISSOURI GREEN GAGE:— A greenish-yellow variety of excellent quality, being fully equal to Reine Claude, but two or three weeks earlier. It does not ripen at the best time for market, but is valuable for home use.

MURDY:— Closely resembles Pond's Seedling in every particular. Although it may be of distinct origin, no points of superiority over Pond's Seedling have yet been observed.

SIMPSON:—A medium to large, yellow variety, ripening a little before Lombard; quality excellent, but the abundant bloom gives the fruit a rather dull appearance. The tree is vigorous and quite prolific. It is earlier than most of the other yellow varieties and seems but little inclined to rot, hence it appears to be worthy of further trial.

SPAULDING:—In many respects this is an excellent variety, but it ripens in midseason, at a time when there are many other good sorts in the market; hence, as it has nothing to recommend it above a number of other good kinds it may not take a place in the standard list. The fruit is greenish-yellow, of good quality, and but little subject to rot. It is desirable for home use.

SARATOGA:—Resembles Lombard so closely that a description of one serves equally well for the other.

TATGE:—Said to be hardier than Lombard, but the same description answers for both. Its hardiness has not been fully tested here.

UNION PURPLE:—A large, fine, purple plum, regarded with considerable favor in some localities. The trees are rather slow in coming into bearing, however, and are only moderately prolific, and the fruit is much inclined to rot. It can hardly be recommended for market purposes, but its large size and good quality entitle it to some consideration.

YELLOW EGG:—A large, yellow variety, of rather low quality, ripening at midseason. It has borne good crops here, but has rotted worse than most other varieties. Its fine appearance makes it a good market variety, and for canning it ranks as first class. Where it succeeds and the rot can be controlled it is a desirable variety.

HYBRID PLUMS.

While a number of varieties of this class have been planted, only two have fruited here, and these not sufficiently long to determine their value.

GOLD:—A very prolific and beautiful yellow variety, ripening at midseason. Fruit large, somewhat apple shaped, yellow with red cheek, often entirely covered with red when fully ripe; quality fair. The exceeding prolificacy and precociousness of this variety, together with its fine appearance, would appear to indicate great value, but it does not ripen properly here. Just before maturity a deep red spot shows on one side of each fruit, which appears to develop into a sort of bitter rot, rendering the fruit unpalatable. When properly ripened the fruit is of fair quality, although rather soft and watery. We had better success in ripening the fruit off the tree than on, but in no case was the quality up to the desired standard. It may be found to be of considerable value for market because of its beauty and prolificacy.

JUICY:—Fruit rather longer than Gold and smaller but of the same color. Tree a stronger grower than Gold, but not more prolific. Probably not desirable, because of rather inferior quality, but further trial may show that it has value as a market sort.

SUMMARY.

(1) About 175 varieties of plums have been planted in the Station orchard and nearly half of these have borne fruit, but the trial has been too short for critical comparison in all cases.

(2) Observations of some of the more common varieties have been extended to orchards in other parts of the state, but this method has not been found to be practicable with many of the newer sorts.

(3) Varieties are grouped into classes, for convenience, and while such grouping may not seem to have much practical value it is often useful in associating resemblances, and enabling one to hold in mind the prominent characteristics of several varieties as easily as of a single one.

(4) Native plums are divided into several groups, but it may be said of them, as a whole, that they are injured less by the curculio, are not so liable to rot and are hardier than European varieties.

(5) Native plums are infertile when planted alone, and where a few varieties are planted care should be taken to select varieties which bloom at about the same time, in order to insure fertilization of blossoms.

(6) The Americana group is the hardiest of the natives, as well as of all other classes. The trees are vigorous, with dark green leaves; the fruit is firm, with thick skin, dull in color but usually high in quality, although having more or less astringency next to skin and stone. Some of the varieties of this class are desirable for home use, but, owing to rather unattractive appearance, but few of those now known are likely to prove profitable for market. The following are some of the most desirable that have been grown here: American Eagle, Champion, Hawkeye, Illinois Ironclad, Louisa, Rollingstone, Weaver.

(7) The Miner group is intermediate between the Americana and Wild Goose groups, and includes some choice varieties for culinary purposes. The following are desirable: Forest Rose, Miner, Prairie Flower.

(8) The Wild Goose group: The varieties of this class are mostly vigorous and very fruitful. The foliage resembles that of the peach, the fruit is thin-skinned, juicy and often watery, and usually not of high quality. Although not as hardy as the Americana species all varieties that have been grown here have endured our winters. In some sections the fruit of varieties of this class is in good demand in the market, but in this state it usually sells at a lower price than that of the Domestica class. The following are worthy varieties: Choptank, Milton, Poole's Pride, Wild Goose, Whitaker.

(9) The Wayland group: Similar in habit of growth to Wild Goose, but the foliage is more shiny, the trees being quite ornamental. The fruit is very firm, not watery, and of fair quality, and in most cases, very bright and beautiful in color. The following are desirable varieties: Golden Beauty, Reed, Sucker State, Wayland, Moreman.

(10) The Chickasaw group: Rather dwarfer and more spreading than the Wild Goose group. Fruit juicy, watery and usually not of high quality. The least desirable of any of the native groups for domestic uses. The following are among the best varieties: Newman, Pottawattamie, Yellow Transparent.

(11) The Triflora group, or Japanese plums: Trees robust in habit and mostly very fruitful. Fruit usually handsomely colored and of good quality, but most varieties quite inclined to rot. Trees bloom very early and most varieties are rather tender in bud. As a class the Japanese sorts have been overrated, but many of the varieties possess considerable merit. The following are some of the best that have been fruited here: Abundance, Chabot, Burbank, Ogon, Red June.

(12) The Domestica group: This is the well known European plum. At present it is the most important class, although subject to numerous diseases and very liable to the attacks of the curculio. The following varieties have been found to be valuable, both here and in other portions of the state: Arch Duke, Bradshaw, Coe's Golden Drop, Grand Duke, German Prune, Gueii, Imperial Gage, Lincoln, Prince of Wales, Reine Claude de Bavay, Yellow Egg.

(13) Hybrid plums: But two varieties of this class have fruited here, viz.: Gold and Juicy. Both are very prolific; beautiful in color, but somewhat deficient in quality. More time is required to determine their value.

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